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Activity 1 - Structure Practice Questions

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The Doctor's Surgery

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Task Scenario

- You have been asked to create a database for the East Berkshire Doctors Surgery.
- Currently all records are stored on a spreadsheet.
- The surgery would like to be able to store and report on surgery visits.
- Currently staff have two types of speciality – GP and Nurse.
- The surgery would like to have more specialised doctors and nurses in the future, but each member of staff will continue to have a single speciality.

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Task Scenario

- The database will record information about:
- Staff
- Patients
- The appointments on a given day.

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Task Scenario

Each doctor must see at least one patient in a day and a patient cannot see more than one doctor in a day.

An Appointment can be a single or a double session identified as 1 or 2.

There are two types of patient: Private and NHS. Privately funded patients are sent a bill of £50 for each visit to the Doctor.

A doctor cannot see more than 2 privately funded patients in a single day.

When an appointment is made the staff and the patient are selected.

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The Data.

Appointment ID	Staff ID	Patient ID	Staff Speciality	Appointment Date	Appointment Type	House Number	Speciality ID	Postcode	Patient Type	Staff Surname	Patient Surname
1	1	27	GP	27/07/2020	1	5	1	RG4 8NP	Private	Smith	Iqbal

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Step 1 – Identify the Primary Keys

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Step 1 – What cam we see from the data?

- What can we see from the supplied data?
- There is an AppointmentID
- There is a StaffID
- There is a PatientID
- There is a SpecialityID

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Step 1 – Identify the Primary Keys

THESE MUST BE PRIMARY KEYS

THAT MEANS WE HAVE **AT LEAST 4** TABLES

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Step 1 – Identify the Primary Keys

Key	Table	Description
AppointmentID	tblAppointment	Stores appointment information
StaffID	tblStaff	Stores staff information
PatientID	tblPatient	Stores patient information
SpecialityID	tblSpeciality	Stores information about the specialities

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Glossary of Terms

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Glossary – Relational Database 1

Key Term	Definition
Attribute	Another name for a Column (or Field) in a Table in a Database.
Cardinality	A measure of how unique values within a column are. A Primary Key column would have High Cardinality, an ‘IsStudent’ column would have Low Cardinality.
Domain	

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Glossary – Relational Database 3

Key Term	Definition
Candidate Key	
Entity Integrity	
Foreign Key	
Primary Key	
Referential Integrity	
Super Key	

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Glossary – SQL

Key Term	Definition
Query	The process of asking a Database a question to get a specific answer.
Select	Specifies the Column or Columns of data you want back from your query, from a Table or Tables within a Database.

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